

## REMARKS

Applicants previously presented claims 1, 2, 7-11, 21, 24, 25, and 27-36 for examination. In the Office Action, the Examiner rejected all of the claims. For at least the reasons to be stated below, Applicants respectfully traverse the rejections.

By this response, Applicants have cancelled claim 9; amended claims 1, 10, 11 and 36; and have added claims 37-38. Accordingly claims 1, 2, 7-8, 10-11, 21, 24, 25, and 27-38 remain pending. Applicants respectfully request that the Examiner reconsider the application in light of the amendments and the remarks expressed herein.

### Claim objections

Claim 10 was objected to in the Office Action. To expedite prosecution, Applicants have cancelled claim 9, and have amended claims 10 and 11 for dependency.

### Priority

The Office Action asserted that the "disclosure of the prior-filed application, Application No. 09/568,613, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application." However, such an assertion is moot because the claims are patentably distinct from the cited references. Applicants also note for the Examiner that priority benefit from 60/247,828, filed November 9, 2000 is claimed.

### 103 Rejections

Claims 1, 2, 7-8, 10-11, 21, 24, 25, 27-34 and 36 were rejected under 35 U.S.C. 103(a) as being unpatentable over Florence (US 2002/0007299, hereinafter "Florence"), in view of Chen et al (USPN 6,741,995, hereinafter "Chen"), in further view of Dietrich et al (USPN 6,526,392, hereinafter "Dietrich"). Claim 35 was rejected under 35 U.S.C. 103(a) as being unpatentable over Florence, in view of Chen, in further view of Dietrich, in further view of Parkinson (USPN 6,990,460, hereinafter "Parkinson"). Applicants respectfully disagree.

Florence on overlapping delivery time windows

Florence pertains to providing overlapping delivery time windows, from which a purchaser may choose a time for delivery. Florence also discusses ways to determine time windows available for choosing based on the least cost of service in making the delivery, the cost of delivering being less than a threshold, and the maximum number of orders in a window being reached.<sup>1</sup>

Florence does not teach or suggest (a) associate a customer value for each customer, (b) divide customers into groups based on their values, (c) determine capacity allocation distribution among the groups, (d) adjust the range of values for one group based on the capacity allocation, and (e) a delivery window for the customer depends on the customer's group and the adjusted customer values

As admitted by the Office Action, Florence does not teach the following: (a) associate a customer value for each customer, (b) divide customers into groups based on their values, (c) determine capacity allocation distribution among the groups, (d) adjust the range of values for one group based on the capacity allocation, and (e) a delivery window for the customer depends on his group and the adjusted customer values.<sup>2</sup>

Applicants submit that Florence not only does not teach the above detailed limitations, Florence does not even suggest any of them.

To try to remedy the deficiencies, the Office Action introduced Chen.

Chen on customer segmentation

Chen pertains to creating a customer profile by analyzing relationships in databases. In general, Chen's method categorizes a customer under a number of segments, including recency (R), frequency (F), monetary (M), profitability (P), age (A) and income (I).<sup>3</sup> Then, Chen combines different segments together to form profiles of the customer.

Chen's figure 2 generally illustrates Chen's method. As shown in its 201, each customer is represented by a cid. Each customer has a number of segmentation codes, such as M and P, where M could be monetary and P could be profitability. Each code has

<sup>1</sup> Florence's Abstract.

<sup>2</sup> The 3<sup>rd</sup> paragraph on page 4 and the 1<sup>st</sup> full paragraph on page 5 of the Office Action.

<sup>3</sup> Col. 5, lines 29-32 in Chen.

a value. In figure 2, customer 1 has a customer code value of 1 for both monetary M and profitability P. Chen also combines segmentation codes into profiles. For example, Profile\_1 (205) combines three segmentation codes, namely R, F and M. For customer 1, all three of the codes have customer code value of 1. The profiles also have values. For example, the Profile\_1 (203) for customer 1 has a value of 3.

Based on the customer profiles, the "marketer can determine the efficacy of her marketing mix", and a product planner "can determine whether to ent[er] a new line of business, or divest an existing line of business."<sup>4</sup>

Chen does not teach or suggest (a) display available delivery windows, (b) receive a selected delivery window from the customer, and (c) identify a delivery route

As a preliminary matter, Chen does not teach or suggest delivery windows and delivery routes, let alone (a) display available delivery windows, (b) receive a selected delivery window from the customer and (c) identify a delivery route based on the selected delivery window.

Chen does not teach or suggest (a) determine capacity allocation distribution among the groups, (b) adjust the range of values for one group based on the capacity allocation, and (c) a delivery window for the customer depends on the customer's group and the adjusted customer values

As admitted by the Office Action, Chen does not teach the following: (a) determine capacity allocation distribution among the groups, (b) adjust the range of values for one group based on the capacity allocation, and (c) a delivery window for the customer depends on his group and the adjusted customer values.<sup>5</sup>

As explained above regarding Chen, Applicants submit that Chen not only does not teach the above detailed limitations, Chen does not even suggest any of them.

In Chen, for every customer, her customer code values are fixed and her profile values are also fixed. Once the values are set, they do not change. For example, once customer 1 has a customer code value of 1 for both monetary (M) and profitability (P), those customer code values are fixed. Similarly, once customer 1 has a Profile\_1 value of

<sup>4</sup> Col. 8, lines 21-24 in Chen.

<sup>5</sup> The 1<sup>st</sup> full paragraph on page 5 of the Office Action.

3, that value is fixed. There is no teaching or suggestions in Chen of changing those values.

It is not clear whether Chen's method would still work if the customer code values are changed. Imagine a marketer previously has classified customer 1 under category 3 (based on its Profile\_1 value being 3). If the Profile\_1 value of customer 1 changes from 3 to 7, the marketer's previous classification would be wrong.

In an attempt to remedy the deficiencies, the Office Action introduced Dietrich.

Dietrich on setting a price for a service contract

Dietrich pertains to setting a price for a service contract.<sup>6</sup> In general, Dietrich first reads data associated with the service. The data involves the forecasted demand from potential customers and existing customers already under contract.<sup>7</sup> Then, Dietrich analyzes the data to create "customer profiles" detailing the anticipated requirement for a specific service for each service delivery interval.<sup>8,9</sup> Note that a "customer profile" in Dietrich is not a profile of a customer. Instead, Dietrich's "customer profile" is a profile for a customer. Examples of a profile for a customer are normal daily shipments and distribution of shipments by month.<sup>10</sup>

From the "customer profiles", Dietrich determines the incremental cost of adding a potential customer. The cost function must deal with the variability in demand over time or space.<sup>11</sup> Based on the incremental cost, Dietrich determines the contract price range, with the incremental cost establishing the minimum of the range, and with any available market data establishing the maximum of the range.<sup>12</sup> Finally, the range is reported to the user. After describing the method in general, Dietrich applies the method to set prices for an express package carrier.<sup>13</sup>

<sup>6</sup> See, for example, Dietrich's title or abstract.

<sup>7</sup> Col. 4, lines 17-22 in Dietrich.

<sup>8</sup> Col. 4, lines 27-40 in Dietrich.

<sup>9</sup> Col. 3, line 6 in Dietrich.

<sup>10</sup> Col. 7, lines 16-24 in Dietrich.

<sup>11</sup> Col. 4, lines 41-44 in Dietrich.

<sup>12</sup> Col. 4, line 66 to col. 5, line 3 in Dietrich.

<sup>13</sup> Col. 5, line 66 in Dietrich.

Dietrich does not teach or suggest (a) display available delivery windows, (b) receive a selected delivery window from the customer, and (c) identify a delivery route based on the selected delivery window

As a preliminary matter, Dietrich does not teach or suggest (a) displaying available delivery windows, (b) receiving a selected delivery window from the customer and (c) identifying a delivery route based on the selected delivery window.

Dietrich does not teach or suggest associating a customer value for each customer, and dividing customers into groups based on their values

As explained above, Dietrich pertains to setting prices for a service contract. There is no teaching or suggestions in Dietrich regarding associating a customer value for each customer and dividing the customers into groups based on their values.

The Office Action indirectly argued that Dietrich has such teachings by stating that Dietrich teaches “the data is analyzed to create customer profiles describing customer service activity”.<sup>14</sup>

As explained above, in Dietrich, a “customer profile” is not a profile of a customer, but a profile for a customer. It is a profile that is the anticipated requirement for a specific service for each service delivery interval. Therefore, Dietrich’s “customer profile” is not a way to categorize or group customers. Dietrich does not teach customer segmentation, or assigning values to customers and grouping them accordingly.

Dietrich does not teach or suggest determine capacity allocation distribution among the groups, and adjust the range of values for one group based on the capacity allocation

With Dietrich not teaching or suggesting putting customers into different groups, Dietrich could not possibly have taught or suggested determining capacity allocation distribution among the groups, let alone adjusting the range of values for one group based on the capacity allocation.

The Office Action indirectly argued that Dietrich has such teachings by stating that Dietrich teaches “evaluate the incremental cost and resource allocation (i.e., range) of adding new customer to the service network (column 3, lines 57-67), in order to

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<sup>14</sup> The second full paragraph on page 5 of the Office Action.

determine the correct price range (i.e., target allocation, column 4, lines 1-3)."<sup>15</sup> Finding the price range of a new service contract is different from determining capacity allocation distribution among the groups. Finding the price range of a new service contract is different from adjusting the range of values for one group based on the capacity allocation.

Dietrich does not teach or suggest a delivery window for the customer depending on the customer's group and the adjusted customer values

With Dietrich not teaching or suggesting (a) putting customers into different groups and/or (b) adjusting customer values, Dietrich could not possibly have taught or suggested a delivery window depending on the customer's group and the adjusted customer values.

The Office Action just asserted that "Dietrich discloses wherein the at least one of the windows available to be selected depends on the customer group to which the specific customer is assigned and the adjusted range of customer point values (i.e., a suitable shipping profile presented to the customer, based upon customer data, column 7, lines 7-24)."<sup>16</sup> In its column 7, lines 7-24, Dietrich generally teaches creating a profile for the customer, such as nominal daily shipments, pieces per shipment, and distribution of shipments by weight, by day of week and by month. Nowhere in that section does Dietrich teach or suggest customer groups or adjusting customer values, let alone a delivery window depending on the customer's group and the adjusted customer values.

Dietrich could not be applied to an order of products held in inventory

Dietrich's patent is on setting prices for a service contract. Not only is Dietrich specifically for a service contract, Dietrich explicitly acknowledges that its method is not applicable for goods produced in advanced and then held in inventory for pickup.

"[T]he methods disclosed here are not likely to be applicable for pricing contracts for manufacturing goods or materials, particularly if the goods or

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<sup>15</sup> The second full paragraph on page 5 of the Office Action.

<sup>16</sup> The second full paragraph on page 5 of the Office Action.

materials can be produced in advanced and held in inventory in anticipation of customer requirements.”<sup>17</sup>

Thus, Dietrich’s method is not applicable to an order of products held in inventory in anticipation of customer demand.

Admissions in the Office Action and in Dietrich alone are sufficient to show that at least claim 1 and its dependent claims are patentably distinct from Florence, Chen and Dietrich

From on the above analysis, Applicants submit that independent of whether there is any motivation to combine the references, at least independent claim 1 together with its dependent claims are patentably distinct from Florence, Chen and Dietrich. This conclusion can be drawn just based on the Office Action acknowledging both Florence and Chen not teaching a number of limitations<sup>18</sup>, and Dietrich admitting its lack of applicability to an order of products held in inventory.

Lack of motivation to combine Florence, Chen and Dietrich

The Office Action asserted that there was motivation to combine just by copying Applicants’ claim languages and then appending at the end “thus efficiently determining the delivery window availability for a customer based upon the customer profile, making Florence system more robust.” There is no rationale supporting the conclusion other than making Florence system more robust.

The Office Action was performing hindsight reconstruction.

Florence pertains to providing delivery time windows that overlap. Florence does not teach or suggest using customer segmentation techniques to set available delivery windows.

Chen covers customer segmentation, but Chen does not teach or suggest using customer segmentation techniques to set available delivery windows.

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<sup>17</sup> Col. 5, lines 52-56 in Dietrich, with emphasis added.

<sup>18</sup> For example, as explained above, the Office Action admitted that both Florence and Chen do not teach (a) determine capacity allocation distribution among the groups, (b) adjust the range of values for one group based on the capacity allocation, and (c) a delivery window for the customer depends on the customer’s group and the adjusted customer values.

Dietrich teaches setting prices for a service contract, but Dietrich does not use customer segmentation techniques. The term "customer profile" in Dietrich is not a profile of a customer, but is a profile for a customer. There are no teachings or suggestions in Dietrich where delivery windows depend on customer segmentation. In fact, Dietrich openly admits that its method is not applicable to an order of products held in inventory.

While it may be permissible in some cases to modify the prior art references in the examination of Applicants' applications, such modifications are not allowed if they are prompted by Applicants' disclosure, rather than by a reasoned analysis of the prior art and by suggestions provided therein.

A rejection is not allowed to use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate Applicants' claimed invention. In this particular situation, the prior art references do not even have many of the "isolated disclosures." For example, Florence, Chen and Dietrich do not teach or suggest (a) determining capacity allocation distribution among customer groups, (b) adjusting the range of values for one group based on the capacity allocation, and (c) a delivery window for the customer depending on the customer's group and the adjusted customer values.

Not only are there no teachings, suggestions or motivations to combine Chen and Dietrich in the manner proposed in the Office Action, numerous limitations in the claimed invention are nowhere to be found in the references. Thus, it is submitted that Florence, Chen and Dietrich do not teach or suggest independent claims 1 and 36, singly or in any combination, and likewise dependent claims 2, 7-8, 10-11, 21, 24, 25, 27-34 and 37-38 for at least the reasons noted above.

Additional limitations recited in the independent claims 1 and 36, or their dependent claims are not further discussed as the above-discussed limitations are clearly sufficient to distinguish the claimed invention from Florence, Chen and Dietrich. Thus, it is respectfully requested that the Examiner withdraw the rejections of claims 1, 2, 7-8, 10-11, 21, 24, 25, 27-34 and 36 under 35 U.S.C. 103(a).



Claim 35 Rejection

Claim 35 was rejected under 35 U.S.C. 103(a) as being unpatentable over Florence, in view of Chen, in further view of Dietrich, in further view of Parkinson. Applicants respectfully disagree.

Parkinson pertains to allocating demand for a number of time periods. If business volume is found to lag or exceed certain thresholds, incentives or surcharges are imposed.

Since Florence, Chen and Dietrich do not teach or suggest numerous limitations in the base claim 1, Parkinson could not remedy the deficiencies even if Parkinson does cover features under dependent claim 35. Thus, it is respectfully requested that the Examiner withdraw the rejections of claim 35 under 35 U.S.C. 103(a).

Conclusion

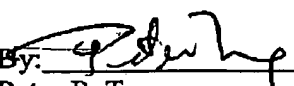
Regarding the remaining references cited by the Examiner, since they have not been applied against any of the claims and do not appear properly applicable thereto, no further mention thereof will be made.

It is submitted that claims 1, 2, 7-8, 10-11, 21, 24, 25, and 27-38 are patentably distinct from the cited references. Reconsideration of the application and an early Notice of Allowance are earnestly solicited.

In the event that the Examiner, upon reconsideration, determines that an action other than an allowance is appropriate, the Examiner is requested and authorized to telephone Applicants' representative prior to taking such action, if the Examiner feels that such a telephone call will advance the prosecution of the present application.

Respectfully submitted,

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